Serial No.: 10/625,105 Filed: July 22, 2003

Page : 2 of 20

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of Claims**:

1-108. (Canceled)

- 109. (Currently Amended) A method of treating or preventing an autoimmune disorder, an allergic disorder, an inflammatory disorder, graft versus host reaction, graft versus host disease, or immune rejection accompanying transplantation of a tissue or organ in a subject, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) a human monoclonal antibody or portion thereof that binds to human AILIM, wherein:
- (a) a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13;
- (b) a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27; or
- (c) a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13, and a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 3 of 20

110. (Previously Presented) The method of claim 109, wherein the method comprises treating or preventing graft versus host reaction or graft versus host disease in the subject.

- 111. (Previously Presented) The method of claim 109, wherein the method comprises treating or preventing immune rejection accompanying transplantation of a tissue or organ in the subject.
- 112. (Previously Presented) The method of claim 111, wherein the method further comprises administering to the subject an effective amount of an immunosuppressant.
- 113. (Currently Amended) A method of treating or preventing an autoimmune disorder, an allergic disorder, an inflammatory disorder, graft versus host reaction, graft versus host disease, or immune rejection accompanying transplantation of a tissue or organ in a subject, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) a human monoclonal antibody or portion thereof that binds to human AILIM, wherein a heavy chain variable region of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 20 through 117 of SEQ ID NO:28;
- (b) amino acids from position 20 through 117 of SEQ ID NO:28 in which one to ten amino acid residues are deleted, substituted, or added;
  - (c) amino acids from position 20 through 116 of SEQ ID NO:32;
- (d) amino acids from position 20 through 116 of SEQ ID NO:32 in which one to ten amino acid residues are deleted, substituted, or added;
  - (e) amino acids from position 20 through 116 of SEQ ID NO:36; and
- (f) amino acids from position 20 through 116 of SEQ ID NO:36, in which one to ten amino acid residues are deleted, substituted, or added.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 4 of 20

114. (Currently Amended) A method of treating or preventing an autoimmune disorder, an allergic disorder, an inflammatory disorder, graft versus host reaction, graft versus host disease, or immune rejection accompanying transplantation of a tissue or organ in a subject, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) a human monoclonal antibody or portion thereof that binds to human AILIM, wherein a light chain variable region of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids from position 23 through 116 of SEQ ID NO:30;
- (b) amino acids from position 23 through 116 of SEQ ID NO:30 in which one to ten amino acid residues are deleted, substituted, or added;
  - (c) amino acids from position 21 through 116 of SEQ ID NO:34;
- (d) amino acids from position 21 through 116 of SEQ ID NO:34 in which one to ten amino acid residues are deleted, substituted, or added;
  - (e) amino acids from position 21 through 116 of SEQ ID NO:38; and
- (f) amino acids from position 21 through 116 of SEQ ID NO:38 in which one to ten amino acid residues are deleted, substituted, or added.
- 115. (Currently Amended) A method of inhibiting proliferation, production of a cytokine, or AILIM-mediated signal transduction in an AILIM-expressing cell, the method comprising contacting the cell with an effective amount of a composition comprising a human monoclonal antibody or portion thereof that binds to human AILIM, wherein:
- (a) a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13;
- (b) a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27; or

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 5 of 20

(c) a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13, and a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.

- 116. (Currently Amended) A method of inhibiting proliferation, production of a cytokine, or AILIM-mediated signal transduction in an AILIM-expressing cell, the method comprising contacting the cell with an effective amount of a composition comprising a human monoclonal antibody or portion thereof that binds to human AILIM, wherein a heavy chain variable region of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 20 through 117 of SEQ ID NO:28;
- (b) amino acids from position 20 through 117 of SEQ ID NO:28 in which one to ten amino acid residues are deleted, substituted, or added;
  - (c) amino acids from position 20 through 116 of SEQ ID NO:32;
- (d) amino acids from position 20 through 116 of SEQ ID NO:32 in which one to ten amino acid residues are deleted, substituted, or added;
  - (e) amino acids from position 20 through 116 of SEQ ID NO:36; and
- (f) amino acids from position 20 through 116 of SEQ ID NO:36, in which one to ten amino acid residues are deleted, substituted, or added.
- 117. (Currently Amended) A method of inhibiting proliferation, production of a cytokine, or AILIM-mediated signal transduction in an AILIM-expressing cell, the method comprising contacting the cell with an effective amount of a composition comprising a human monoclonal antibody or portion thereof that binds to human AILIM, wherein a light chain variable region of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 6 of 20

(a) amino acids from position 23 through 116 of SEQ ID NO:30;

- (b) amino acids from position 23 through 116 of SEQ ID NO:30 in which one to ten amino acid residues are deleted, substituted, or added;
  - (c) amino acids from position 21 through 116 of SEQ ID NO:34;
- (d) amino acids from position 21 through 116 of SEQ ID NO:34 in which one to ten amino acid residues are deleted, substituted, or added;
  - (e) amino acids from position 21 through 116 of SEQ ID NO:38; and
- (f) amino acids from position 21 through 116 of SEQ ID NO:38 in which one to ten amino acid residues are deleted, substituted, or added.
- 118. (New) The method of claim 109, wherein a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13.
- 119. (New) The method of claim 109, wherein a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.
- 120. (New) The method of claim 109, wherein a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13, and a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.
- 121. (New) The method of claim 120, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02, and the V region DNA encoding the light

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 7 of 20

chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.

- 122. (New) The method of claim 120, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 3-13, and the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.
- 123. (New) The method of claim 113, wherein a heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 20 through 470 of SEQ ID NO:28,
- (b) amino acids from position 20 through 470 of SEQ ID NO:28 in which one to ten amino acid residues are deleted, substituted, or added,
  - (c) amino acids from position 20 through 470 of SEQ ID NO:32,
- (d) amino acids from position 20 through 470 of SEQ ID NO:32 in which one to ten amino acid residues are deleted, substituted, or added,
  - (e) amino acids from position 20 through 470 of SEQ ID NO:36, and
- (f) amino acids from position 20 through 470 of SEQ ID NO:36 in which one to ten amino acid residues are deleted, substituted, or added.
- 124. (New) The method of claim 114, wherein a light chain polypeptide of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 23 through 236 of SEQ ID NO:30,
- (b) amino acids from position 23 through 236 of SEQ ID NO:30 in which one to ten amino acid residues are deleted, substituted, or added,

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 8 of 20

(c) amino acids from position 21 through 236 of SEQ ID NO:34,

- (d) amino acids from position 21 through 236 of SEQ ID NO:34 in which one to ten amino acid residues are deleted, substituted, or added,
  - (e) amino acids from position 21 through 236 of SEQ ID NO:38, and
- (f) amino acids from position 21 through 236 of SEQ ID NO:38 in which one to ten amino acid residues are deleted, substituted, or added.
- 125. (New) The method of claim 113, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain variable region comprising amino acid 20 through 117 according to SEQ ID NO:28, and
- a light chain variable region comprising amino acid 23 through 116 according to SEQ ID NO:30.
- 126. (New) The method of claim 123, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:28, and
- a light chain polypeptide comprising amino acid 23 through 236 according to SEQ ID NO:30.
- 127. (New) The method of claim 113, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain variable region comprising amino acid 20 through 116 according to SEQ ID NO:32, and
- a light chain variable region comprising amino acid 21 through 116 according to SEQ ID NO:34.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 9 of 20

128. (New) The method of claim 123, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:32, and

a light chain polypeptide comprising amino acid 21 through 236 according to SEQ ID NO:34.

129. (New) The method of claim 113, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain variable region comprising amino acid 20 through 116 according to SEQ ID NO:36, and

a light chain variable region comprising amino acid 21 through 116 according to SEQ ID NO:38.

130. (New) The method of claim 123, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:36, and

a light chain polypeptide comprising amino acid 21 through 236 according to SEQ ID NO:38.

- 131. (New) The method of claim 109, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02.
- 132. (New) The method of claim 109, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 3-13.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 10 of 20

133. (New) The method of claim 109, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.

- 134. (New) The method of claim 109, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.
- 135. (New) The method of claim 118, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.
- 136. (New) The method of claim 118, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.
- 137. (New) The method of claim 113, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 117 of SEQ ID NO:28.
- 138. (New) The method of claim 113, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 116 of SEQ ID NO:32.
- 139. (New) The method of claim 113, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 116 of SEQ ID NO:36.

Serial No.: 10/625,105 Filed: July 22, 2003 Page: 11 of 20

140. (New) The method of claim 123, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEQ ID NO:28.

- 141. (New) The method of claim 123, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEQ ID NO:32.
- 142. (New) The method of claim 123, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEO ID NO:36.
- 143. (New) The method of claim 114, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 23 through 116 of SEQ ID NO:30.
- 144. (New) The method of claim 114, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 116 of SEQ ID NO:34.
- 145. (New) The method of claim 114, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 116 of SEQ ID NO:38.
- 146. (New) The method of claim 124, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 23 through 236 of SEQ ID NO:30.

Serial No.: 10/625,105

Filed : July 22, 2003 Page : 12 of 20

147. (New) The method of claim 124, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 236 of SEO ID NO:34.

- 148. (New) The method of claim 124, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 236 of SEQ ID NO:38.
- 149. (New) The method of claim 115, wherein a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13.
- 150. (New) The method of claim 115, wherein a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.
- 151. (New) The method of claim 115, wherein a V region DNA encoding a heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02 or 3-13, and a V region DNA encoding a light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5 or A27.
- 152. (New) The method of claim 151, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02, and the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 13 of 20

153. (New) The method of claim 151, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 3-13, and the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.

- 154. (New) The method of claim 116, wherein a heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 20 through 470 of SEQ ID NO:28,
- (b) amino acids from position 20 through 470 of SEQ ID NO:28 in which one to ten amino acid residues are deleted, substituted, or added,
  - (c) amino acids from position 20 through 470 of SEQ ID NO:32,
- (d) amino acids from position 20 through 470 of SEQ ID NO:32 in which one to ten amino acid residues are deleted, substituted, or added,
  - (e) amino acids from position 20 through 470 of SEQ ID NO:36, and
- (f) amino acids from position 20 through 470 of SEQ ID NO:36 in which one to ten amino acid residues are deleted, substituted, or added.
- 155. (New) The method of claim 117, wherein a light chain polypeptide of the human monoclonal antibody or portion thereof comprises an amino acid sequence selected from the group consisting of:
  - (a) amino acids from position 23 through 236 of SEQ ID NO:30,
- (b) amino acids from position 23 through 236 of SEQ ID NO:30 in which one to ten amino acid residues are deleted, substituted, or added,
  - (c) amino acids from position 21 through 236 of SEQ ID NO:34,

Serial No.: 10/625,105 Filed: July 22, 2003 Page: 14 of 20

(d) amino acids from position 21 through 236 of SEQ ID NO:34 in which one to ten amino acid residues are deleted, substituted, or added,

- (e) amino acids from position 21 through 236 of SEQ ID NO:38, and
- (f) amino acids from position 21 through 236 of SEQ ID NO:38 in which one to ten amino acid residues are deleted, substituted, or added.
- 156. (New) The method of claim 116, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain variable region comprising amino acid 20 through 117 according to SEQ ID NO:28, and
- a light chain variable region comprising amino acid 23 through 116 according to SEQ ID NO:30.
- 157. (New) The method of claim 154, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:28, and
- a light chain polypeptide comprising amino acid 23 through 236 according to SEQ ID NO:30.
- 158. (New) The method of claim 116, wherein the human monoclonal antibody or portion thereof comprises:
- a heavy chain variable region comprising amino acid 20 through 116 according to SEQ ID NO:32, and
- a light chain variable region comprising amino acid 21 through 116 according to SEQ ID NO:34.

Serial No.: 10/625,105 Filed: July 22, 2003 Page: 15 of 20

159. (New) The method of claim 154, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:32, and

a light chain polypeptide comprising amino acid 21 through 236 according to SEQ ID NO:34.

160. (New) The method of claim 116, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain variable region comprising amino acid 20 through 116 according to SEQ ID NO:36, and

a light chain variable region comprising amino acid 21 through 116 according to SEQ ID NO:38.

161. (New) The method of claim 154, wherein the human monoclonal antibody or portion thereof comprises:

a heavy chain polypeptide comprising amino acid 20 through 470 according to SEQ ID NO:36, and

a light chain polypeptide comprising amino acid 21 through 236 according to SEQ ID NO:38.

- 162. (New) The method of claim 115, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 1-02.
- 163. (New) The method of claim 115, wherein the V region DNA encoding the heavy chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin heavy chain V gene segment 3-13.

Serial No.: 10/625,105 Filed: July 22, 2003 Page: 16 of 20

164. (New) The method of claim 115, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.

- 165. (New) The method of claim 115, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.
- 166. (New) The method of claim 149, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment L5.
- 167. (New) The method of claim 149, wherein the V region DNA encoding the light chain variable region of the human monoclonal antibody or portion thereof is from human immunoglobulin light chain V gene segment A27.
- 168. (New) The method of claim 116, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 117 of SEQ ID NO:28.
- 169. (New) The method of claim 116, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 116 of SEQ ID NO:32.
- 170. (New) The method of claim 116, wherein the heavy chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 116 of SEQ ID NO:36.

Serial No.: 10/625,105 Filed: July 22, 2003 Page: 17 of 20

171. (New) The method of claim 154, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEQ ID NO:28.

- 172. (New) The method of claim 154, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEQ ID NO:32.
- 173. (New) The method of claim 154, wherein the heavy chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 20 through 470 of SEQ ID NO:36.
- 174. (New) The method of claim 117, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 23 through 116 of SEQ ID NO:30.
- 175. (New) The method of claim 117, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 116 of SEQ ID NO:34.
- 176. (New) The method of claim 117, wherein the light chain variable region of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 116 of SEQ ID NO:38.
- 177. (New) The method of claim 155, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 23 through 236 of SEQ ID NO:30.

Serial No.: 10/625,105 Filed: July 22, 2003

Page : 18 of 20

178. (New) The method of claim 155, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 236 of SEQ ID NO:34.

179. (New) The method of claim 155, wherein the light chain polypeptide of the human monoclonal antibody or portion thereof comprises amino acids from position 21 through 236 of SEQ ID NO:38.